Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1. – 31. (Cancelled)

32. (Currently Amended) A functionalized support material having the formula:

$$SS–[NH-(C(R^1)(R^2))_p-C(R^3)(R^4)(OR^7)]_m$$

wherein:

SS represents a support material;

R^1, R^2, R^3, and R^4 are each independently hydrogen or an organic group with the proviso that at least one of R^3 and R^4 is an aromatic group;

~~The functionalized support of claim 31 wherein~~ R^7 is hydrogen, a protecting group, or an organic group capable of being derivatized;

p is at least 1; and

m is 1 to the resin capacity of the support material.

33. (Currently Amended) A functionalized support material having the formula:

$$SS–[NH-(C(R^1)(R^2))_p-C(R^3)(R^4)(OR^7)]_m$$

wherein:

SS represents a support material;

R^1, R^2, R^3, and R^4 are each independently hydrogen or an organic group with the proviso that at least one of R^3 and R^4 is an aromatic group;

R^7 is hydrogen or an organic group;

p is at least 1; and

m is 1 to the resin capacity of the support material;

~~The functionalized support of claim 31 which~~ wherein the functionalized support material is in the form of a plurality of particles.

34. (Original) The functionalized support of claim 33 wherein each R^7 is the same on any one particle.

35. (Original) The functionalized support of claim 33 wherein the plurality of particles comprise at least two different R^7 groups.

36. (Original) The functionalized support of claim 35 which forms a combinatorial library.

37. (Currently Amended) A functionalized support material having the formula:

$$SS–[NH-(C(R^1)(R^2))_p-C(R^3)(R^4)(OR^7)]_m$$

wherein:

SS represents a support material;

R^1, R^2, R^3, and R^4 are each independently hydrogen or an organic group with the proviso that at least one of R^3 and R^4 is an aromatic group;

R^7 is hydrogen or an organic group;

p is at least 1; and

m is 1 to the resin capacity of the support material;

~~The functionalized support of claim 31 which~~ wherein the functionalized support material is in the form of a membrane.

38. (Original) The functionalized support of claim 37 wherein each R^7 is the same on the membrane.

39. (Original) The functionalized support of claim 37 wherein the membrane comprises at least two different R^7 groups.

40. (Original) The functionalized support of claim 39 which forms a combinatorial library.

41. (Currently Amended) A functionalized support material having the formula:

$$SS–[NH\text{-}(C(R^1)(R^2))_p\text{-}C(R^3)(R^4)(OR^7)]_m$$

wherein:

SS represents a support material;

R^1, R^2, R^3, and R^4 are each independently hydrogen or an organic group with the proviso that at least one of R^3 and R^4 is an aromatic group;

R^7 is hydrogen or an organic group;

p is at least 1; and

m is 1 to the resin capacity of the support material;

~~The functionalized support of claim 31~~ wherein $NH\text{-}(C(R^1)(R^2))_p\text{-}C(R^3)(R^4)(OR^7)$ is bound to the support material through a carbonyl group.

42. (Allowed) A functionalized support having the following formula:

$$SS–[C(O)\text{-}NH\text{-}C(R^5)(R^6)\text{-}(CH_2)_n\text{-}C(O)\text{-}NH\text{-}(C(R^1)(R^2))_p\text{-}C(R^3)(R^4)(OR^7)]_m$$

wherein:

SS represents a support material;

R^1, R^2, R^3, and R^4 are each independently hydrogen or an organic group with the proviso that at least one of R^3 and R^4 is an aromatic group;

R^7 is hydrogen or an organic group;

R^5 and R^6 are each independently an organic group;

n is 0 to 1;

p is at least 1; and

m is 1 to the resin capacity of the support material.

43. (Allowed) The functionalized support of claim 42 wherein p is 1 to 20.

44. (Allowed) The functionalized support of claim 42 wherein R^7 is hydrogen, a protecting group, or an organic group capable of being derivatized.

45. (Allowed) The functionalized support of claim 42 which is in the form of a plurality of particles.

46. (Allowed) The functionalized support of claim 45 whercin each R^7 is the same on any one particle.

47. (Allowed) The functionalized support of claim 45 wherein the plurality of particles comprise at least two different R^7 groups.

48. (Allowed) The functionalized support of claim 47 which forms a combinatorial library.

49. (Allowed) The functionalized support of claim 42 which is in the form of a membrane.

50. (Allowed) The functionalized support of claim 49 wherein each R^7 is the same on the membrane.

51. (Allowed) The functionalized support of claim 49 wherein the membrane comprises

at least two different R^7 groups.

52. (Allowed) The functionalized support of claim 51 which forms a combinatorial library.

53. (Allowed) A functionalized support having the following formula:

$SS–[C(O)-NH-C(R^5)(R^6)-(CH_2)_n-C(O)-NH-(R^8)-NH-C(O)-R^9]_m$

wherein:

SS represents a support material;

R^5, R^6, and R^9 are each independently an organic group;

R^8 is an organic connecting group;

n is 0 to 1; and

m is 1 to the resin capacity of the support material.

54. (Allowed) The functionalized support of claim 53 wherein $C(O)-R^9$ is derived from 4-hydroxymethylbenzoic acid, 4-hydroxymethylphenoxyacetic acid, 4-hydroxymethyl-3-methoxyphenoxybutyric acid, 4-hydroxymethylphenylacetic acid, 4-bromoacetylphenoxyacetic acid, 4-(diphenylhydroxymethyl)benzoic acid, 4-hydroxymethyl-2-methoxy-5-nitrophenoxybutyric acid, phenoxyacetic acid and phenoxybutyric acid analogs of Rink acid and Rink amide linker molecules and Sieber amide linker molecules, 4-sulfamylbenzoic acid, 4-sulfamylbutyric acid, 4-formylphenoxyacetic acid, 4-(4-formyl-3-methoxyphenoxy)butyric acid, 4-formyl-3,5-dimethoxyphenoxyacetic acid, or 3-formylindol-1-ylacetic acid.

55. (Allowed) The functionalized support of claim 53 wherein $NH-(R^8)-NH$ is derived from ethylenediamine, 1,3-propanediamine, 1,3-diamino-2-hydroxypropane, or 1,6-hexanediamine.

56. (Allowed) The functionalized support of claim 53 which is in the form of a plurality

of particles.

57. (Allowed) The functionalized support of claim 56 wherein each R^9 is the same on any one particle.

58. (Allowed) The functionalized support of claim 56 wherein the plurality of particles comprise at least two different R^9 groups.

59. (Allowed) The functionalized support of claim 56 which forms a combinatorial library.

60. (Allowed) The functionalized support of claim 53 which is in the form of a membrane.

61. (Allowed) The functionalized support of claim 60 wherein each R^9 is the same on the membrane.

62. (Allowed) The functionalized support of claim 60 wherein the membrane comprises at least two different R^9 groups.

63. (Allowed) The functionalized support of claim 62 which forms a combinatorial library.

64. (Cancelled)

65. (Allowed) A functionalized support having the following formula:

$$SS\text{–}[C(O)\text{-}NH\text{-}C(R^5)(R^6)\text{-}(CH_2)_n\text{-}C(O)\text{-}NH\text{-}(C(R^1)(R^2))_p\text{-}C(R^3)(R^4)(OR^7)]_m$$

wherein:

SS represents a support material;

R^1, R^2, R^3, and R^4 are each independently hydrogen, a (C1-C14)alkyl group, a (C3-C14)cycloalkyl group, or a (C5-C12)aryl group, with the proviso that at least one of R^3 and R^4 is a (C5-C12)aryl group;

R^7 is hydrogen or an organic group;

R^5 and R^6 are each independently a (C1-C14)alkyl group, a (C3-C14)cycloalkyl group, or a (C5-C12)aryl group;

n is 0 to 1;

p is 1 to 20; and

m is 1 to the resin capacity of the support material.

66. (Allowed) A functionalized support having the following formula:

$SS–[C(O)\text{-}NH\text{-}C(R^5)(R^6)\text{-}(CH_2)_n\text{-}C(O)\text{-}NH\text{-}(R^8)\text{-}NH\text{-}C(O)\text{-}R^9]_m$

wherein:

SS represents a support material;

R^5 and R^6 are each independently a (C1-C14)alkyl group, a (C3-C14)cycloalkyl group, or a (C5-C12)aryl group;

R^9 is an organic group;

R^8 is a (C1-C1000)alkylene group;

n is 0 to 1; and

m is 1 to the resin capacity of the support material.